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DEPARTMENT OF NATURAL RESOURCES

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MEMORANDUM

DATE: February 10, 2004

TO: Air Pollution Control Program Procedures Manual

FROM: Leanne J. Tippet, ^{JK} Director
Air Pollution Control Program

SUBJECT: Interim Policy for Construction Industry Permits

I. STATEMENT OF ISSUE

This Interim Policy alters the procedure in which construction permits for the Construction Industry are reviewed (i.e., Rock Crushing/Screening plants, Concrete Batch Plants and Hot Mix Asphalt Plants). Over the last few years, the program has been in steady dialogue with Industry representatives regarding the effectiveness of the screening spreadsheet tools. Industry representatives have noted particular frustrations with high ambient impact values predicted by the screening tools in the evaluation of fugitive emissions. On December 3, 2003, Industry representatives met with the program to request an Interim Policy to address the evaluation of haul roads and stockpiles in the screening tools, and to present evidence in support of their proposal.

After reviewing, the program believes that the Industry's comparison of nomographs with a limited monitoring dataset is not adequate to come to a specific decision on revising the evaluation techniques. However, the program agrees that the evaluation techniques used in this screening analysis should be reassessed. The program has agreed to this Interim Policy while representatives of the program and Industry will work together to reassess the evaluation screening tools with the goal of more accurately reflecting the emissions, source characterization, and method of operation for construction industry sources. The goal is to complete this evaluation and begin utilization of the revised screening tools within a year of the issuance of this policy.



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For sources agreeing to use the Best Management Practices (BMP's) or Reasonable Management Practices¹ (RMP's) as defined in the signed attachments to this policy, haul roads and stockpiles will not be modeled with the screening tools. Instead, they will be addressed as a uniform value of 20 $\mu\text{g}/\text{m}^3$. To ensure conformity with the National Ambient Air Quality Standard (NAAQS) limitation, the remaining process emissions will be limited to an impact of 130 $\mu\text{g}/\text{m}^3$ at the nearest property boundary. The BMP's and RMP's requirements are contained in attachments to this Policy.

II. APPLICABILITY

This Interim Policy only applies to construction permits for the following types of installations: Rock Crushing/Screening plants, Concrete plants, and Asphalt plants. Installations requesting review under this Interim Policy must agree to apply BMP's or RMP's at the plant-site as defined in the signed attachments to this Policy. The Air Pollution Control Program Director reserves the right to disallow use of this Interim Policy on a case-by-case basis at sites with documented air quality problems or for sources with a history of significant noncompliance.

This Interim Policy does not change the evaluation of fugitive emissions for refined dispersion modeling analysis purposes. Any refined modeling or modeling review procedures must account for fugitives from any source, including construction industry sources. This Interim Policy is also not applicable to projects involving increment analysis and/or major review.

III. PROCEDURES

- A. Technical Review under this Interim Policy will be performed in the same fashion as the current review procedure, with the following exceptions: The ambient impact from haul roads and stockpiles will not be included in the screening analysis tools. Instead, only the process equipment emissions will be included toward an ambient impact of 130 $\mu\text{g}/\text{m}^3$ at the nearest property boundary. Technical Review of multiple operation will be accomplished in the same manner as that applied for solo operations however, all concurrently operating plants will be limited to a combined ambient impact of 130 $\mu\text{g}/\text{m}^3$ at the nearest property boundary. This procedure for review and issuance of permits will remain in effect until such time as new modeling and permitting procedures based on sound scientific and generally accepted engineering procedures are put in place.
- B. For permits issued under this Interim Policy that agree to use BMP's the Air Quality Analysis shall be considered final. These permits shall remain in effect

¹ No information is available to describe the Reasonable Management Practices at this time.

indefinitely subject to the authorities available to the Director pursuant to RSMo Chapter 643 and the regulations promulgated thereunder.

- C. For permits issued under this Interim Policy that agree to use RMP's the Director reserves the right to reopen the permit to address changes necessary to comply with the new procedures developed pursuant to Section III A, of this policy.

IV. RETENTION OF AUTHORITY

Nothing in this Interim Policy precludes the Director from taking appropriate actions authorized under RSMO Chapter 643 or the regulations promulgated thereunder.

LJT/mas

Best Management Practices (BMPs)- Construction Industry

Fugitive Emissions Sources

Construction Industry Sites covered by the Interim Relief Policy shall maintain Best Management Control Practices (BMP's) for fugitive emission areas at their installations when in operation. Options for BMP's are at least one of the following:

For Haul Roads

1. Pavement of Road Surfaces –

- A. The operator(s) may pave all or any portion of the haul roads with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve "Control of Fugitive Emissions"¹ while the plant is operating.
- B. Maintenance and/or repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
- C. The operator(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road(s) as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Usage of Chemical Dust Suppressants –

- A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the unpaved portions of the haul roads. The suppressant will be applied in accordance with the manufacturer's suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
- B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
- C. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. Usage of Documented Watering –

- A. The operator(s) shall control the fugitive emissions from all the unpaved portions of the haul roads at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating. For example, the operator(s) shall calculate the total square feet of unpaved vehicle activity area requiring control on any particular day, divide that product by 1,000, and multiply the quotient by 100 gallons for that day.
- B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operation (e.g., meteorological situations, precipitation events, freezing, etc.)
- C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
- D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
- E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the

¹ For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)

operator(s) shall make these records available to Department of Natural Resources personnel upon request.

For Vehicle Activity Areas around Open Storage Piles

1. Pavement of Stockpile Vehicle Activity Surfaces –

- A. The operator(s) may pave all or any portion of the vehicle activity areas around the storage piles with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement will be applied in accordance with industry standards for such pavement so as to achieve control of fugitive emissions while the plant is operating.
- B. Maintenance and/or repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
- C. The operator(s) shall periodically water, wash and/or otherwise clean all of the paved portions of the vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Usage of Chemical Dust Suppressants –

- A. The operator(s) shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the vehicle activity areas around the open storage piles. The suppressant will be applied in accordance with the manufacturer's suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
- B. The quantities of the chemical dust suppressant shall be applied, re-applied and/or maintained sufficient to achieve control of fugitive emissions from these areas while the plant is operating.
- C. The operator(s) shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.

3. Usage of Documented Watering –

- A. The operator(s) shall control the fugitive emissions from all the vehicle activity areas around the storage piles at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of vehicle activity areas around the storage piles as necessary to achieve control of fugitive emissions from these areas while the plant is operating. (Refer to example for documented watering of haul roads.)
- B. The operator(s) shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operations (e.g., meteorological situations, precipitation events, freezing, etc.)
- C. Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating.
- D. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The operator(s) shall record a brief description of such events in the same log as the documented watering.
- E. The operator(s) shall record the date and the amount of water applied for each application on the above areas. The operator(s) shall keep these records with the plant for not less than five (5) years, and the operator(s) shall make these records available to Department of Natural Resources personnel upon request.